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### FAX COVER SHEET

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TO: Commissioner for Patents

Attn: Examiner Zheng Wei Group Art Unit: 2192

FROM:

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INTERVIEW REQUEST AGENDA

Applicant:

A.K. HAWLEY et al.

Serial No.:

10/731,970

Filed:

December 9, 2003

Group Art Unit:

2192

Docket No.:

SVL920030037US1

CERTIFICATE UNDER	.37 CFR 1.8:

I hereby certify that this correspondence is being transmitted by facsimile to Examiner Zheng Wei of the U.S. Patent and Trademark Office on February 27, 2009.

/David Victor/

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

A.K. HAWLEY et al.

Examiner

Zheng Wei

Serial No.

10/731,970

Group Art Unit

2192

Filed TITLE December 9, 2003 Docket No.

SVL920030037US1

USER CONFIGURABLE LANGUAGE INDEPENDENT CODE ASSIST ENGINE METHOD, SYSTEM, ARTICLE OF MANUFACTURE, AND

COMPUTER PROGRAM PRODUCT

CERTIFICATE UNDER 37 CFR 1.8:

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/David Victor/

David W. Victor

#### PROPOSED AMENDMENT

Applicants submit this proposed amendment to include the amendments the Examiner proposed in the facsimile dated February 25, 2009 and to add claims 27-34 including the requirements of pending claims 7-10 in article of manufacture and system form, as discussed with the Examiner. Added claims 27-30 include the requirements of claims 7-10 in article of manufacture form and added claim 27 includes the preamble of canceled claim 1 as presented in the Amendment dated May 8, 2007. Added claims 31-34 include the requirements of claims 7-10 in system form and added claim 31 includes the preamble and first three limitations of canceled claim 13 as presented in the Amendment dated May 8, 2007, with the recitation of a "computer readable storage medium. Applicants authorize the Examiner to enter this proposed amendment to place the Application in condition for allowance.

Amendments to the Claims are reflected in the listing of claims which begins on page 2.

Remarks/Arguments begin on page 5.

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This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims

- 1-6. (Canceled)
- 7. (Currently Amended) A method of providing a code assist function which suggests candidates responsive to a parsing of a partial program instruction statement, said method comprising:

parsing a partial program instruction statement into tokens, wherein the tokens are identified and divided into keywords and variables according to a computer language in which the partial program instruction statement is written;

determining whether the tokens match one of a plurality of syntax statements statement tokens in a syntax library for [[a]] the computer language by comparing the keywords against keywords of the syntax statement tokens or comparing the variables against symbols of the syntax statement tokens in which the partial program instruction statement is written;

moving a cursor positioned on one of the tokens for which the match is determined to a following token in response to determining that the token matches one of the syntax statements statement tokens in the syntax library;

in response to determining that the token on which the cursor is positioned does not match one of the syntax statements statement tokens generating proposals from the cursor position based on previous tokens in the partial program instruction that matched syntax statements statement tokens in the syntax library;

providing proposals to append to the partial program instruction statement to a user responsive to the parsing of the partial program instruction statement.

8. (Currently Amended) The method of claim 7 further comprising:

proposing [[an]] one of the identified variable variables as a proposal responsive to the previous token a verb of the partial program instruction statement, wherein the previous token is a verb.

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- 9. (Currently Amended) The method of claim 7 further comprising: proposing [[an]] one of the identified variable variables as a proposal responsive to a variable type of the variable.
- 10. (Currently Amended) The method of claim 7 further comprising:

  proposing [[an]] one of the identified variable variables as a proposal responsive to the previous token a verb of the partial program instruction statement, wherein the previous token is a verb, or responsive to a variable type of the variable.
- 11. (Currently Amended) The method of claim 7 further comprising:

  proposing [[an]] one of the identified variable variables as a proposal responsive to a
  portion of the program containing the partial program instruction statement.
- 12. (Original) The method of claim 7 wherein the parsing of the program and the parsing of the partial program instruction statement are performed according to a user-selected programming language dependent file selected from a plurality of programming language dependent files.
  - 13-19. (Canceled)
- 20. (Previously Presented) The method of claim 7, further comprising: determining whether an end of the partial program instruction statement is reached; and in response to determining that the end of the program instruction statement is reached, generating proposals.
  - 21. (Canceled)
- 22. (Previously Presented) The method of claim 7, further comprising:

  determining the computer language in which the partial program instruction statement is
  written; and

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selecting one of a plurality of syntax libraries to use to determine whether the tokens match one of the plurality of syntax statements in the syntax library specific to the determined computer language.

- 23. (Previously Presented) The method of claim 7, wherein the partial program instruction statement is parsed based upon syntax statements from the syntax library.
- 24. (Previously Presented) The method of claim 7, further comprising:
  generating a cursor index when moving the cursor indicating last matching tokens in the
  partial program instruction; and

wherein generating proposals comprises generating proposals from the cursor index position for the last matched token.

25. (Previously Presented) The method of claim 24, wherein generating proposals comprises:

generating proposals from the last matching token; and adding the proposals to a proposal vector.

- 26. (Previously Presented) The method of claim 25, wherein proposal vectors are generated from multiple cursor engines parsing different parts of the program statements; concatenating the proposal vectors to create a combined proposal vector that is returned; matching the combined proposal vector to determine an image; displaying a window containing the determined image from which the user select a keyword, identifier or constant to continue entry of the partial program statement.
- 27. (New) An article of manufacture for use in a computer system for providing assistance to a programmer writing computer programming code, said assistance comprising suggested candidates responsive to a parsing of a partial program instruction statement, said article of manufacture comprising a computer-uscable storage medium having a computer program embodied in said medium which causes the computer system to execute operations comprising:

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parsing a partial program instruction statement into tokens, wherein the tokens are identified and divided into keywords and variables according to a computer language in which the partial program instruction statement is written:

determining whether the tokens match syntax statement tokens in a syntax library for the computer language by comparing the keywords against keywords of the syntax statement tokens or comparing the variables against symbols of the syntax statement tokens;

moving a cursor positioned on one of the tokens for which the match is determined to a following token in response to determining that the token matches one of the syntax statement tokens in the syntax library;

in response to determining that the token on which the cursor is positioned does not match one of the syntax statement tokens generating proposals from the cursor position based on previous tokens in the partial program instruction that matched syntax statement tokens in the syntax library;

providing proposals to append to the partial program instruction statement to a user responsive to the parsing of the partial program instruction statement.

28. (New) The article of manufacture of claim 27, wherein the operations further comprise:

proposing one of the identified variables as a proposal responsive to the previous token a of the partial program instruction statement, wherein the previous token is a verb.

29. (New) The article of manufacture of claim 27, wherein the operations further comprise:

proposing one of the identified variables as a proposal responsive to a variable type of the variable.

30. (New) The article of manufacture of claim 27, wherein the operations further comprise:

proposing one of the identified variables as a proposal responsive to the previous token of the partial program instruction statement, wherein the previous token is a verb, or responsive to a variable type of the variable.

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31. (New) A computer system for providing a code assist function which suggests candidates responsive to a parsing of a partial program instruction statement, said computer system comprising:

a processor;

a computer readable storage medium;

a code assist engine in the computer readable storage medium executed by the processor to perform operation comprising:

parsing a partial program instruction statement into tokens, wherein the tokens are identified and divided into keywords and variables according to a computer language in which the partial program instruction statement is written;

determining whether the tokens match syntax statement tokens in a syntax library for the computer language by comparing the keywords against keywords of the syntax statement tokens or comparing the variables against symbols of the syntax statement tokens;

moving a cursor positioned on one of the tokens for which the match is determined to a following token in response to determining that the token matches one of the syntax statement tokens in the syntax library;

in response to determining that the token on which the cursor is positioned does not match one of the syntax statement tokens generating proposals from the cursor position based on previous tokens in the partial program instruction that matched syntax statement tokens in the syntax library;

providing proposals to append to the partial program instruction statement to a user responsive to the parsing of the partial program instruction statement.

- 32. (New) The computer system of claim 31, wherein the operations further comprise: proposing one of the identified variables as a proposal responsive to the previous token a of the partial program instruction statement, wherein the previous token is a verb.
- 33. (New) The computer system of claim 31, wherein the operations further comprise:

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proposing one of the identified variables as a proposal responsive to a variable type of the variable.

34. (New) The computer system of claim 31, wherein the operations further comprise:

proposing one of the identified variables as a proposal responsive to the previous token of the partial program instruction statement, wherein the previous token is a verb, or responsive to a variable type of the variable.

\* \* \*

Should any fees be required, please charge Deposit Account No. 09-0460.

The attorney of record invites the Examiner to contact him at (310) 553-7977 if the Examiner believes such contact would advance the prosecution of the case.

Dated: February 27, 2009

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